SAT Report

PMN Number: P-13-0687 SAT Date: 7/16/2013 Print Date: 11/26/2014

Related cases:

Concern levels:

Type of Concern: <u>Health</u> <u>Eco</u> <u>Comments</u>

Level of Concern: 2

Persistence Bioaccum Toxicity Comments

1 2

Awaiting
Human Health
Entry

Exposure Based Review:

Health: No Ecotox: Yes

Routes of exposure: Health: Drinking Water Inhalation

Ecotox: All releases to water

Fate: ;

Keywords:

Keywords:

Summary of Assessment:

<u> Fate:</u>

Fate Summary: P-13-0687

FATE: Estimations for low weight, covalent ion pair

MW 451

Solid with MP = 90 C (E)

 $\begin{array}{l} \log \ Kow = -7.57 \ (E) \\ S > 10 \ g/L \ at \ 25 \ C \ (E) \\ VP < 1.0E-6 \ torr \ at \ 25 \ C \ (E) \\ BP > 400 \ C \ (E) \\ H < 1.00E-8 \ (E) \\ \log \ Koc = 2.65 \ (E) \\ \log \ Fish \ BCF = 0.50 \ (E) \\ \log \ Fish \ BAF = -0.05 \ (E) \\ POTW \ removal \ (\%) \ = 050 \ via \ biodeg \\ Time \ for \ complete \ ultimate \ aerobic \ biodeg = mo \\ Sorption \ to \ soils/sediments = low \\ PBT \ Potential: \ P2B1 \\ \end{array}$

*CEB FATE: Migration to ground water = rapid

Health:

Health Summary: Absorption is nil through the skin, moderate through the GI tract, and good through the lungs based on physical/chemical properties. There is concern for developmental toxicity due to and based on information submitted in for the free acid that showed skeletal effects in pups at 1 g/kg and resorptions and decreased fetal weights at 2000 mg/kg along with maternal toxicity at both dose levels. There is also concern for effects on the bone and bone cancer based the along the skin, moderate through the GI tract, and good through the lungs based on physical/chemical properties. There is concern for the free acid that showed skeletal effects in pups at 1 g/kg and resorptions and decreased fetal weights at 2000 mg/kg along with maternal toxicity at both dose levels. There is also concern for effects on the bone and bone cancer based the large tracks are also concern as seen after oral administration in male rats.

Ecotox:

Test Organism	Test	Test End	Predicted	Measured	Comments
	Type	Point			
fish	96-h	LC50	>100		
daphnid	48-h	LC50	>100		
green algal	96-h	EC50	20		
fish	_	chronic value	>10		
daphnid	_	chronic	>10		
		value			
algal	_	chronic	7.4		
		value			
Sewage Sludge	3-h	EC50	_		
Sewage Sludge	_	Chronic	_		
		Value			

Ecotox Values Comments:

Factors	Values	Comments
Assessment Factor	10	
Concentration of Concern	740	
(ppb)		

SARs		
SAR Class		
Ecotox Category		

Ecotox Factors Comments:

SAT Chair: L Keifer 564-8916

Focus Report

New Chemicals Program PMN Number: P-13-0687

Focus Date: 07/24/2013 11:00:00 PM Report Status: Completed Consolidated Set: Focus Chair: Loraine Passe Contractor: Jean Quenneville I. Notice Information Submitter: Compass Chemical International LLC CAS Number: Chemical Name: Use: Other Uses: None found. PV-Max: Manufacture: Import: SAT Results (1) Health Rating: Eco Rating: Comments: Non-Occupational: Environmental: 3 Occupational: 1C (1) **PBT**: 2 2 Comments: III. OTHER FACTORS Categories: Health Chemical Category: Ecotox Category: Related Cases/Regulatory History: Health related Cases: Ecotox Related Cases: Similar Case . Analogs: -REG NON 5E SNUR Regulatory History: -Excluded from reporting -Excluded from reporting -Final conditional grant -WITHDRAWN - OTHER -OR MID-COURSE DISP DROP -WITHDRAWN - OTHER SR MID-COURSE DISP DROP/FR MSDS/Label Information: MSDS: Label: No Safety glasses with side shields or goggles, chemical resistant gloves, long sleeves, safety shower General Equipment: and eyewash station. Where overexposure by inhalation may occur and engineering, work practice or other means of Respirator: exposure reduction are not adequate, approved respirators may be necessary. Eyes: Irritating, but does not injure eye tissue. Skin: Prolonged or repeated contact my irritate. Health Effects: Ingestion: Swallowing this material may be harmful. Inhalation: Vapors and/or aerosols may be irritating to eyes and respiratory tract. - None established. TLV/PEL (PMN or raw material): **Exposure Based Information:**

Exposure Based Review: Y
Exposure Based Review (Eco): Y
Exposure Based Review (Eco): Y
Exposure Based Review N
Exposure Based (Occupational): No
Exposure Based (Environmental): Y

(Non Occupatuional):

Exposure Parameter Exposure-Based Persistent/Bioaccum Exposure Value

Yes

Surface DW: Fish Ingestion:

Ground DW: Yes
Inhalation: Yes
Water Releases: Yes
Total Releases: Yes
Consumer Exposure: Yes



IV. Summary of SAT Assessment

Fate:

Fate Summary: P-13-0687

FATE: Estimations for

Solid with MP = 90 C (E) log Kow = -7.57 (E) S > 10 g/L at 25 C (E) VP < 1.0E-6 torr at 25 C (E)

BP > 400 C (E) H < 1.00E-8 (E) log Koc = 2.65 (E) log Fish BCF = 0.50 (E) log Fish BAF = -0.05 (E)

POTW removal (%) = 0-50 via biodeg

Time for complete ultimate aerobic biodeg = mo

Sorption to soils/sediments = low

PBT Potential: P2B1

*CEB FATE: Migration to ground water = rapid

Health:

Health Summary: Absorption is nil through the skin, moderate through the GI tract, and good through the lungs based

on physical/chemical properties. There is concern for developmental toxicity due to and based on information submitted in a for the angle of that showed skeletal effects in pups at 1 g/kg and resorptions and decreased fetal weights at 2000 mg/kg along with maternal toxicity at both dose levels. There is also concern for effects on the bone and bone cancer based the

. The Q1* value for is based on osteogenic sarcomas seen

after oral administration in male rats.

Ecotox:

Ecotox Values:

Fish 96-h LC50: >100(P)
Daphnid 48-h LC50: >100(P)
Green algal 96-h EC50: 20(P)
Fish Chronic Value: >10(P)
Daphnid ChV: >10(P)
Algal ChV: 7.4(P)

Ecotox values comments: Predictions are based on SARs for

solid with mpunknown (P); S > 500 g/L at 20 C (M);

pH7; effective concentrations based on 100% active ingredients and nominal concentrations;

hardness < 150.0 mg/L as CaCO3; and TOC <2.0 mg/L;

Ecotox Factors:

Assessment Factor: 10 Concern Concentration: 740

V. Summary of Exposures/Releases Engineering Summary: P-13-0687

Exposures/Releases	Release	Release	Release
Scenario			
Sites			
Media			
Descriptor A	Output 2	Conservative	Conservative
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			·
Workers			
Exposure Type			

Engineering Summary:	Release	Release	Release
Exposures/Releases			
Scenario			
Sites			
Media			
Descriptor A	High End	High End	Output 2
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

V. Summary of Exposures/Releases Engineering Summary: P-13-0687

Exposures/Releases	Release	Release	Release
Scenario			
Sites			
Media			
Descriptor A	Output 2	Output 2	High End
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

Engineering Summary:	Release	Release	Release
Exposures/Releases			
Scenario		•	
Sites			
Media			
Descriptor A	Output 2	High End	Output 2
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

V. Summary of Exposures/Releases Engineering Summary: P-13-0687

Exposures/Releases	Exposure	Exposure	Exposure
Scenario			
au.			
Sites			
Media			
Descriptor A	High End	High End	High End
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

Engineering Summary:	Exposure	Exposure	
Exposures/Releases			
Scenario			
Sites			
Media			
Descriptor A	High End	High End	
Quantity A (kg/site/day)			
Frequency A (day/year)			
Descriptor B			
Quantity B (kg/site/day)			
Frequency B (day/year)			
From			
Workers			
Exposure Type			

VI. Focus Decision and Rationale

Regulatory Actions

Regulatory Decision: PMN Ban Pending Upfront Testing Decision Date: 07/24/2013

Type of Decision:

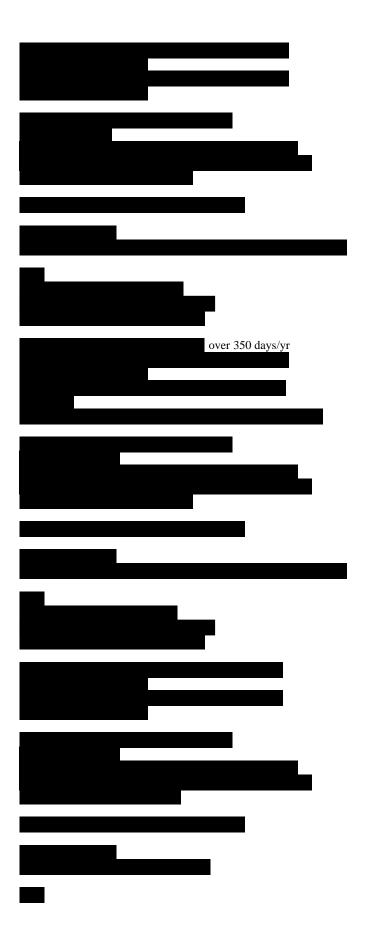
Rationale:

P-13-0687 will be regulated under the TSCA 5(e) category Ban Pending-Up Front Testing under the risk based authority for ecotoxicity hazard concerns and exposure-based human health and ecotoxicity concerns. Human health hazard concerns were moderate for inhalation exposures. Potential risks to workers were mitigated by negligible vapor exposures. Ecotoxicity hazard concerns were moderate based on SAR . Chronic risks to the environment were predictions for high due to releases to water where the chronic COC of 740 ppb was exceeded days () during manufacturing operations, 177/ during processing operations, 219 during use 1 operations, 38/ days during) during use 3 use 2 operations, and 164/ operations. Acute risks to the environment were high due to releases to water where the SWCs of during manufacturing, during processing operations, during use operations, during use 3 operations exceeded the acute use 2 operations and COC of 5,000 ppb. The required ecotoxicity testing will be the acute base set: Freshwater daphnids (OPPTS Test Guidelines 850.1010), Fish acute toxicity test, freshwater (OPPTS Test Guidelines 850.1075), and the Algal toxicity test (OCSPP Test Guidelines 850.4500). The required fate testing will be the Porous pot test (OPPTS 835.3220) or the Zahn-Wellens/EMPA test (OPPTS 835.3200). The required human health testing will be the Combined repeated dose toxicity with the reproduction/development toxicity screening test (OECD 422). No CEB exposure-based criteria were met. The following EAB exposure-based criteria were met:

COC: Chronic - 740 ppb, Acute - 5,000 ppb

Summary of Exposures and Releases







P2 Rec Comments:

Testing:

Final Recommended: Health:

Eco:

Fate:

Other:

PMN Summary

Case IV	umber:	P-13-0687		Day in Process: 91 Total Days:	
Consolida	ated Cases	No		PMN Summary Only?	O Yes ● No
PMN Day	1 :	07/08/2013		Original PMN Day 90:	10/05/2013
Total Day	s Suspended:	268		PMN Day 90 (30,45,6	06/30/2014
	Phase	SI	tatus	Decision	
Post Focus	Pridse	Archive	idius	PMN Ban Pending Upfront Testi Decision Date: 07/25/2013 Decision Type: Decision History: CRSS Decision Forward made on 07/15/2013 Focus Decision of PMN Delay m 07/18/2013 Focus Decision of PMN Ban Pen Testing made on 07/25/2013	on of Move nade on
Disposition His	Date Story		Withdrawn on 06/2	Final Disposition	
CRSS Descrip Additional Des	ptors:		YX-Exposure-Bas		
Withdrawn Dat	te:				
CRSS Date:	07/14/2013				
SAT Date:	07/16/2013		Document	Type: Premanufacture Notice	e (PMN)
Focus Date:	07/24/2013		Case Numb	ber: P-13-0687	
			Day(1): 07-	-08-2013	
			Document	Processing Comments: SRN	N: XXX313070825289875
			Submission	File Name: formdata.pdf	
			Attachmen	ts(s)	
			• Name:	Operation description.pdf	
			• Name:	Ammonium salt of MQ-2350) -MSDS.pdf
				Flow diagram.pdf	
				CAS Registry Lookup Resul	
				AEEA-Phosphonate (MQ-23	350) Process.pdf
			• Name:	MQ-2350 Properties.pdf	
Chemist Sc	hechter, K.		Engineer:	Choudhary	
	Ceifer 564-8916		Exposure Specialist:	Cinalli/SD	
Chair:	raine Passe		Contractor	Yes O No	

Chemical

Name:						
Submitte r:	Compass Chemical Interna	ational LLC	Trade Name:	Mayoquest 23	350	
	Stephen Redding	Stephen Redding			(678) 904-4071 sredding@compasschemical.com	
Manufact ure:	X		Import:			
	O Yes ■ No		Grouping for CRSS:			
	No		Grouping for Focus:			
Production			Binding Option:	No		
Volume:						
ES Order No.:			CAS Number:			
Uses:						
$\overline{}$					_	
Ratin	gs and Concern Levels:					
	Health Ratings	Eco Ra	tings		Comm	nents
(1) 2		2		į		
Non-Occ	cupational Exposure:	1C 3				
Non-Occ Environn		3				
Non-Occ Environn Engineeri	eupational Exposure: nental Exposure: ing Drop Criteria/Exposure D	3		icity		BT Comments
Non-Occ Environn	supational Exposure: nental Exposure: ing Drop Criteria/Exposure D	3 3 rop: /	(1) 2		PE 1)	BT Comments
Non-Occ Environn Engineeri (1) 2 Exposure Exposure Exposure	eupational Exposure: nental Exposure: ing Drop Criteria/Exposure D	3 3 rop: /	Exposure Base	ased Review (lased Review (lased Review	1) Health): Occupational):	O Yes ● No
Non-Occ Environn Engineeri (1) 2 Exposure Exposure Exposure	eupational Exposure: Inental Exposure: Inental Exposure: Ing Drop Criteria/Exposure D Persistence (1) 1 Sure Based Information Based Review (Chemistry) Based Review (Ecotox):	3 3 rop: / Bioaccumulation Yes O No Yes O No	Exposure Background Ba	ased Review (lased Review (lased Review	1) Health): Occupational):	O Yes ● No 1 ● Yes ○ No
Non-Occ Environn Engineeri (1) 2 Exposure Exposure Exposure Exposure (Non-Occ	eupational Exposure: mental Exposure: me	3 3 rop: / Bioaccumulation Yes O No Yes O No	Exposure Background Ba	ased Review (lased Review (lased Review ntal): Criteria Sed FateSurfa	1) Health): Occupational):	O Yes ● No
Exposure Exposure Exposure Exposure Exposure Exposure Exposure Exposure 1. Num 1000 2. > 10	eupational Exposure: mental Exposure: me	3 3 rop: // Bioaccumulation : Yes O No Yes O No Yes O No	Exposure Base Exposure Base (Environment	ased Review (lased Review (lased Review ntal): Criteria Sed FateSurfa	1) Health): Occupational):	O Yes ● No 1 ● Yes ○ No O Yes ● No O Yes ● No
Exposure Exposure Exposure Exposure Exposure Exposure Exposure (Non-Occ 1. Num 1000 2. > 10 Inha 3a. > 10	eupational Exposure: mental Exposure: me	Bioaccumulation Yes No Yes No Yes No	Exposure Base (Environment of Exposure Base) Exposure Base (Environment of Exposure-Base) 1. Exposure-Base Drinking Water?	ased Review (ased Review (ased Review ntal): Criteria sed FateSurfa n: sed FateGrou	Health): Occupational):	O Yes ● No 1 ● Yes ○ No O Yes ● No O Yes ● No ● Yes ○ No
Non-Occ Environm Engineeri (1) 2 Exposure Exposure Exposure (Non-Occ 1. Num 1000 2. > 10 Inha 3a. > 10 Inha 3b. > 25	rupational Exposure: mental Exposure: me	Bioaccumulation Yes No Yes No Yes No	Exposure Base Exposure Base (Environment Environment Exposure-Base Drinking Water? 2. Fish Ingestion 3. Exposure-Base Exposure-B	ased Review (lased Review ntal): Criteria Sed FateSurfa	Health): Occupational): face	O Yes ● No 1 ● Yes ○ No O Yes ● No O Yes ● No ● Yes ○ No ● Yes ○ No
Non-Occ Environm Engineeri (1) 2 Exposure Exposure Exposure (Non-Occ 1. Num 1000 2. > 10 Inha 3a. > 10 Inha 3b. > 25	Persistence Persistence (1) 1 Sure Based Information Based Review (Chemistry) Based Review (Ecotox): Based Review (Ecotox): Criteria The of Workers Exposed > 0? Workers With > 10 mg/Daylation Exposure Workers With 1-10 mg/Daylation Exposure > 100 Days/ Workers With Routine	Bioaccumulation Yes O No Yes O No Yes O No O Yes O No	Exposure Ba Exposure Ba Exposure Ba (Environment 1. Exposure-Ba Drinking Water? 2. Fish Ingestion 3. Exposure-Ba Drinking Water?	ased Review (lased Review ntal): Criteria sed FateSurfa n: sed FateGroupsed FateInha	Health): Occupational): ace und	O Yes ● No 1 ● Yes ○ No O Yes ● No O Yes ● No ● Yes ○ No ● Yes ○ No ● Yes ○ No
Non-Occ Environm Engineeri (1) 2 Exposure Exposure Exposure (Non-Occ 1. Num 1000 2. > 10 Inha 3a. > 10 Inha 3b. > 25	Persistence Persistence (1) 1 Sure Based Information Based Review (Chemistry) Based Review (Ecotox): Based Review (Ecotox): Criteria The of Workers Exposed > 0? Workers With > 10 mg/Daylation Exposure Workers With 1-10 mg/Daylation Exposure > 100 Days/ Workers With Routine	Bioaccumulation Yes O No Yes O No Yes O No O Yes O No	Exposure Base Exposure Base (Environment Environment Exposure-Base Drinking Water? 2. Fish Ingestion 3. Exposure-Base Drinking Water? 4. Exposure-Base Exp	ased Review (lased Review (lased Review ntal): Criteria sed FateSurfa n: sed FateGroup lised FateInha	Health): Occupational): ace und	O Yes ● No 1 ● Yes ○ No O Yes ● No O Yes ● No ● Yes ○ No ● Yes ○ No

Post Focus Agenda Information Meeting Date Meeting Time Location Issue Proposed Decision CCD Dispo: 5140 Division Director's: 4140 Program Manager/Technical Integrator Date No. Assignment **Branch** Resource **Phone** Assigned 01. Program Manager CCD/NCNMB Zofia Kosim (202) 564-8733 08/01/2013 Workgroup Assignments **Assignment** No. **Branch** Resource **Phone** Assig SNUR History: Federal Register Number; Federal Registry Date; Reason; Federal Registry Citation SNUR Citations: Sanitization Due Date: ; SNUR notification to reviewers: ; Generic name: O Yes \bigcirc No Batch identifier: CEB Rep: Eric Jackson ICB Rep: Jasbir Sarna EAB Rep: RAD Rep: Done: O Yes Done: O Yes Done: O Yes O Yes Done: O_{No} O_{No} O_{No} O No Notice of Commencement: Has the case been NOC'd? O Yes O No Status History: 7/10/2013 3:27:35 PM -- Phase Initial Review -- kathryn schechter 7/10/2013 3:27:35 PM -- Status Pending CRSS -- kathryn schechter 7/11/2013 3:33:48 PM -- Status changed from Pending CRSS to Scheduled for CRSS -- kathryn schechter 7/15/2013 10:12:10 AM -- Status changed from Pending CRSS to Pending Focus -- Paul Bickart 7/15/2013 10:12:10 AM -- Decision changed from to FWD-Move Forward -- Paul Bickart 7/16/2013 1:31:53 PM — Status changed from Pending Focus to Scheduled for Focus — Eric Jackson

Dat

7/16/2013 1:38:43 PM Status changed from Pending Focus to Scheduled for Focus Eric Jackson
7/18/2013 2:03:21 PM Status changed from Pending Focus to Scheduled for Focus Eric Jackson
7/18/2013 2:03:21 PM Decision changed from FWD-Move Forward to PMN Delay Eric Jackson
7/25/2013 1:28:18 PM Phase changed from Initial Review to Post Focus Jean Quenneville
7/25/2013 1:28:18 PM Status changed from Scheduled for Focus to Ban Pending Testing Jean Quenneville
7/25/2013 1:28:18 PM Decision changed from PMN Delay to PMN Ban Pending Upfront Testing Jean Quenneville
9/24/2013 9:54:04 AM Case suspended for 61 day(s) on 9/24/2013 9:54:04 AM Ken Moss
10/22/2013 6:45:53 AM Case suspended for 16 day(s) on 10/22/2013 6:45:53 AM kathryn schechter
3/26/2014 3:49:36 PM Case suspended for 161 day(s) on 12/21/2013 Greg Schweer
6/6/2014 7:51:26 AM Case suspended for 30 day(s) on 5/31/2014 Greg Schweer
6/30/2014 8:23:54 AM withdrawn on 06/26/14 Zofia Kosim

New Status History Comments:

Reactivated By: Leonard Keifer -- 11/13/2014 9:09:10 AM

General Comments:

10/22/2013 6:45:53 AM -- The review period for this case was extended for 16 days due to the government furlough between October 1st 2013 and October 16th 2013. -- kathryn schechter

PMN Summary Comments:

Last Updated by Leonard Keifer on 11/18/2014 at 06:41:30 AM

Document Created by kathryn schechter on 07/10/2013